



REPLY TO
ATTENTION OF:

CENCR-PD-E

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING-P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

AD-A207 293

ENVIRONMENTAL ASSESSMENT

BOB SHETLER AND COTTONWOOD RECREATION AREAS
BIKE TRAIL CONSTRUCTION
SAYLORVILLE RESERVOIR
POLK COUNTY, IOWA



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FEBRUARY 1989

ENVIRONMENTAL ASSESSMENT

BOB SHETLER AND COTTONWOOD RECREATION AREAS BIKE TRAIL CONSTRUCTION SAYLORVILLE RESERVOIR POLK COUNTY, IOWA

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ENVIRONMENTAL ASSESSMENT

BOB SHETLER AND COTTONWOOD RECREATION AREAS BIKE TRAIL CONSTRUCTION SAYLORVILLE RESERVOIR POLK COUNTY, IOWA

I. PURPOSE AND NEED FOR ACTION.

This action involves the construction of bike trails in the Bob Shetler and Cottonwood Recreation Areas at Saylorville Reservoir. The Bob Shetler Bike Trail would provide direct access from the Bob Shetler Recreation Area to an existing bike trail system that runs from Des Moines to Polk City, Iowa. The only other access is by way of the highway that crosses the top of Saylorville Dam. The proposed trail would provide a much shorter route and would avoid highway traffic.

The Cottonwood Bike Trail would provide an alternative route through the Cottonwood Recreation Area. The existing bike trail ends at the southern reach of the recreation area, utilizes the roadways within the recreation area, and picks up again at the area's northern end. These roads become heavily used during the peak times of the summer season and can pose a hazard to bicyclists, especially from cars backing out of parking spaces. The proposed trail would provide separate bike and traffic routes through the recreation area.

II. PROJECT DESCRIPTION.

The proposed bike trails would be located at Saylorville Reservoir in Polk County, Iowa, 3 miles north of the Des Moines city limits. The Bob Shetler Bike Trail is located approximately 1,200 feet south (downstream) of Saylorville Dam in sec. 32, T. 80 N., R. 24 W. The Cottonwood Bike Trail is about 2,850 feet south of the dam in sec. 32, T. 80 N., R. 24 W., and sec. 5, T. 79 N., R. 24 W. Plate 1 shows the projects' locations.

The Bob Shetler Bike Trail would be 500 feet long. It crosses the old bed of the Des Moines River and connects the recreation area on the west bank to the existing bike trail on the east bank. Plate 2 shows the alignment.

The Cottonwood Bike Trail would be 4,930 feet long and for much of the way would follow an existing snowmobile trail that runs in a mostly northerly-southerly direction. It would tie in with the existing bike trail at both the northern and southern ends of the recreation area. Plate 3 shows the alignment.

The work in both areas consists of preparing the existing surface, placing borrow material, installing culverts, placing riprap, placing granular base material, and placing asphaltic cement concrete. Plate 4 shows typical cross sections. Approximate quantities for both sites are shown in table EA-1.

TABLE EA-1

Required Construction Materials

<u>Site</u>	<u>Location</u>	<u>Borrow Mat'l (C.Y.)</u>	<u>Culvert (L.F.)</u>	<u>ACC Surfacing (Ton)</u>	<u>Granular Base (Ton)</u>	<u>Riprap (Ton)</u>
Bob Shetler Bike Trail	Sta 0+00-5+00	5315	70	50	120	100
Cottonwood Bike Trail	Sta 0+00-11+00, Sta 28+00-49+30	0	0	315	750	0
	Sta 11+00-28+00	4200	50	170	410	50

All work within the floodplain would be done at zero or low flows. Upon completion of construction, disturbed areas will be reseeded.

Borrow areas from which fill will be taken are shown on plate 1. The primary site lies within an abandoned oxbow and is the preferred site. After removal of fill, the site would be shaped to prevent drainage and to enhance the area's wetland value. If moisture conditions prevent access, then a secondary site would be used. This site is located adjacent to the southern end of the proposed Cottonwood Trail. After removal of fill, it also would be sloped to promote pothole-wetland habitat.

III. ALTERNATIVES.

A. No Federal Action. Under this alternative, no construction would take place. No Federal Action, however, would not provide direct access between the Bob Shetler Recreation Area and the existing bike trail, nor would it provide an alternative route from traffic in the Cottonwood Recreation Area.

B. Bike Trail Construction. This alternative is the action previously described under "Project Description." While the trail construction could have varied somewhat, the alignments shown in plate 1 provide for specific locations. The Bob Shetler Bike Trail provides direct access between the recreation area and existing bike trail and affects as little habitat as possible. The Cottonwood Bike Trail would follow within the same alignment as the existing snowmobile trail, thereby reducing the need for upkeep of two trails. Therefore, the trails, as described, are the preferred alternative.

IV. AFFECTED ENVIRONMENT.

The Bob Shetler Bike Trail crosses the old riverbed of the Des Moines River. The old riverbed was the main flowage channel prior to construction of the Saylorville Dam. The area through which the trail would be placed consists of a large, permanent pool of water bordered by a berm of slightly higher ground. The higher ground is vegetated by a sandbar willow (Salix interior) thicket

and rice cutgrass (Leersia oryzoides). A narrow band of sandy shoreline occurs between the pool and berm. Its upper reaches contain (Carex sp.) and smartweed (Polygonum sp.).

Trail construction would run at a slight diagonal to the pool, with fill placed just into the water's edge and on the berm at the western end, and completely on the berm along the eastern end. The extreme eastern end of the alignment would pass through approximately 40 feet of immature silver maple (Acer saccharinum) and American elm (Ulmus americana) upon the riverbank.

The Cottonwood Bike Trail follows the same alignment that is used as a snowmobile trail during the winter. The trail is kept free of woody vegetation, but herbaceous species are present. The southernmost 1,100 feet of trail passes through an area of old field succession composed almost exclusively of goldenrod (Solidago sp.). The next 1,700 feet (going northward) winds through the bottom of an abandoned river oxbow. Vegetation consists of mixed-age bottomland forest dominated by silver maple. Other species include cottonwood (Populus deltoides), American elm, green ash (Fraxinus pennsylvanica), hackberry (Celtis occidentalis), and box elder (Acer negundo). Ground cover consists mostly of stinging nettle (Urtica dioica). The remaining 2,130 feet runs between the outside edge of the oxbow and the edge of restored native prairie. This area is dominated by species such as giant ragweed (Ambrosia trifida) and goldenrod.

The project area provides habitat to a variety of wildlife. Various songbirds are common and include the northern cardinal, bluejay, sparrow, common grackle, and black-capped chickadee. The wooded areas provide habitat for the red-headed, downy, and hairy woodpeckers. Raptors most likely to occur in the project area, which use smaller wooded tracts and forest edge, are the red-tailed hawk and the great horned owl.

The most abundant mammals include mice, shrews, and voles. Others found in the area are the striped skunk, cottontail rabbit, raccoon, groundhog, and opossum. The lack of mid-story generally limits larger mammals to using the sites as foraging and travel corridors.

The fisheries resource within the project site is limited. The pool of water adjacent to the northern edge of the Bob Shetler Bike Trail may contain warm-water fish such as bluegill, catfish, carp, and buffalo. The majority of the old riverbed, along with the abandoned oxbow in the Cottonwood Recreation Area, is palustrine wetland that may contain seasonally flooded areas suitable for the spawning of carp, buffalo, and similar fish.

Soils within the trail alignments are typical of the floodplain of the Des Moines River. They consist of alluvial land (predominantly sand and gravel often covered by a varying layer of silt) and deep loam over sand and gravel. Abandoned sand and gravel pits are found in both the Bob Shetler and Cottonwood Recreation Areas.

Previous archeological investigations indicate that no significant historic properties are located in the proposed project area. Both Bob Shetler and Cottonwood Recreation Areas have been inventoried and evaluated for

significant historic properties. No significant resources were identified. Furthermore, the proposal to borrow fill from an existing oxbow has no potential to impact on historic properties.

7. ENVIRONMENTAL CONSEQUENCES OF PREFERRED ACTION.

The effects of the preferred plan are summarized in table EA-2.

A. Economic and Social Impacts of the Preferred Plan.

1. Community and Regional Growth. No significant effects to community or regional growth would result from the proposed trail constructions.

2. Displacement of People. No residential relocations would be necessitated by the projects.

3. Community Cohesion. No adverse impacts to community cohesion would be noticed, due to the nature of the projects.

TABLE EA-2

Effects of the Recommended Plan on
Natural and Cultural Resources

<u>Types of Resources</u>	<u>Authorities</u>	<u>Evaluation of Effects</u>
Air quality	Clean Air Act, as amended (42 U.S.C. 1857h-7, et seq.)	No significant effect
Areas of particular concern within the coastal zone	Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451, et seq.)	Not present in planning area
Endangered and threatened species critical habitat	Endangered Species Act of 1973, as amended (16 U.S.C. 1531, et seq.)	No effect
Fish and wildlife habitat	Fish and Wildlife Coordination Act (16 U.S.C. 661, et seq.)	No significant effect
Floodplains	Executive Order 11968, Flood Plain Management	No significant effect

TABLE EA-2 (Cont'd)

<u>Types of Resources</u>	<u>Authorities</u>	<u>Evaluation of Effects</u>
Historic and cultural properties	National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.)	No significant effect
Prime and unique farmland	CEQ Memorandum of August 1, 1980; Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act	No significant effect
Water quality	Clean Water Act of 1977, as amended (33 U.S.C. 1251, et seq.)	No significant effect
Wetlands	Executive Order 11990, Protection of Wetlands, Clean Water Act of 1977, as amended (42 U.S.C. 1857h-7, et seq.)	No significant effect
Wild and scenic rivers	Wild and Scenic Rivers Act, as amended, (16 U.S.C. 1271, et seq.)	No effect

4. Property Values and Tax Revenues. The potential value of the affected property might increase slightly following construction of the bike trails. However, this property is in Federal ownership, so an increase in its value would not increase local tax revenues.

5. Public Facilities and Services. The project sites are federally owned and zoned for low-density or intensive recreation use. The proposed trail developments would link camping areas to the existing Saylorville bike trail network. The trails would provide a more direct and safer route for recreationists accessing other facilities at the Saylorville complex, and would provide additional recreational facilities to help fulfill the growing demands of bikers, joggers, and other trail users.

6. Life, Health, and Safety. The Bob Shetler and Cottonwood Bike Trails would reduce life, health, and safety threats faced by recreationists at the recreation facilities. The trails would provide more direct and safer routes within and between recreation areas by removing recreationists from dangerous alternative routes (i.e., roadways) and separating motor-vehicle traffic from pedestrians and bikers.

7. Employment and Labor Force. Construction of the bike trails would have a limited, short-term impact on employment in the project vicinity. No permanent effect on area employment would result.

8. Business and Industrial Development. A slight increase in business and industrial activity might be noticed during project construction. No business or industrial relocation would be required by the proposed trail developments.

9. Farm Displacement. No farms or lands normally farmed would be affected.

10. Noise Levels. Heavy machinery would cause an increase in noise levels during construction. Although no residences, schools, or hospitals are within the immediate project sites, users at both recreation areas may be affected. Noise level increases would be temporary, and construction would take place away from the heavily used areas. Therefore, no significant impacts should occur.

11. Aesthetics. The proposed trails would not greatly alter current aesthetic conditions in the vicinity. The Cottonwood Trail would follow an existing snowmobile path, requiring only minimal placement of borrow material. The Bob Shetler Trail would cross an old riverbed, with fill being placed along the shoreline. While this trail would pass through a small area of immature silver maples and American elms, aesthetic impacts would not be significant.

B. Environmental Impacts of Preferred Action.

1. Manmade Resources. The single-most significant manmade resource in the project vicinity is Saylorville Reservoir. Bike trail construction would have a positive effect to the reservoir's recreational resources by improving the safety and efficiency of the bike trail network.

2. Natural Resources. The construction of a total of 5,430 lineal feet of bike trail would result in the loss of vegetation currently within the alignments. Although the trail berms would be revegetated, the loss within the 8-foot-wide trail section would be permanent. Impacts to woody vegetation would be minimal. The Bob Shetler Trail construction would result in the loss of part of a willow sapling thicket in the old riverbed and a few immature silver maple and elm trees where the proposed trail meets the existing trail. The Cottonwood Bike Trail, because it follows the alignment of an existing snowmobile trail, would result in the loss of few, if any, trees.

Most ground (herbaceous) cover affected by the trail alignment is very common within the project area. These species (giant ragweed, goldenrod, and stinging nettle) would not be noticeably reduced.

Impacts to wildlife would be minimal. The lack of a mid-story for cover limits the extent to which many of the species utilize the area. Many of the larger mammals are nocturnal and would continue to use the area for foraging or as travel corridors. Cavity nesters would continue to use their existing nests or to relocate in nearby trees. Smaller mammals such as mice and voles would relocate and be absorbed into nearby communities.

Project impacts to fisheries would be minimal. The west end of the Bob Shetler Bike Trail would be constructed just into the edge of the permanent pool of water in the old riverbed. This would result in the loss of a negligible part of the pool. Culverts placed at the natural drainage areas in the old riverbed and the abandoned oxbow would allow fish continued access to the upper reaches of these areas during high water.

Abandoned sand and gravel quarries are located in both recreation areas. Their use now is solely for recreation. The proposed bike trails should have no effect on them. No other mineral resources are known in the immediate project vicinity, and no impacts to such resources should occur.

3. Water Quality. Minor, temporary increases in turbidity may occur as a result of construction. All work would be done at low or zero flows, with disturbed areas reseeded upon completion of the trails. Fill would come from sites nearby the trail alignments. These are rural sites away from concentrated urban or industrial development and are not likely to contain any hazardous or toxic substances that could leach into the aquatic ecosystem. No significant impacts to water quality should occur.

4. Air Quality. Minor, temporary increases in machinery exhaust and in dust from construction would occur.

5. Endangered Species. The bald eagle (Haliaeetus leucocephalus) is the only federally threatened or endangered species listed for Polk County, Iowa. The bald eagle winters in the county where it uses large trees near open water as day perches and large trees in sheltered valleys during times of bad weather or as night roosts. Such habitat does not exist within the immediate project vicinity, and the bald eagle should not be affected by the project.

6. Cultural Resources. The proposed construction of the bike path and associated borrow activities will not impact any significant historic properties. The recreation areas have been previously evaluated and coordinated with the Iowa State Historic Preservation Officer and Advisory Council on Historic Preservation and are cleared for construction under a Memorandum of Agreement with these agencies executed in March 1986.

VI. ENVIRONMENTAL IMPACTS OF THE NONPREFERRED ALTERNATIVE.

With the "no action" alternative, no impacts resulting from the construction would occur. Neither would there be direct access to the Bob Shetler Recreation Area nor a traffic-free alternative route in the Cottonwood Recreation Area.

VII. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED.

Exhaust and dust from construction, the loss of mainly herbaceous vegetation, and the temporary disruption of wildlife and increases in turbidity cannot be avoided.

VIII. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IF THE PROPOSED ACTION SHOULD BE IMPLEMENTED.

The purchase of materials and the commitment of man-hours, fuel, and machinery to perform the project are irretrievable.

IX. RELATIONSHIP BETWEEN SHORT-TERM USE OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY.

Bike trail construction would cause initial impacts to vegetation, fish and wildlife, and air and water quality. All of these would be short-term, with the exception of vegetative losses within the trail alignment. The borrow areas would receive short-term impacts during the removal of fill but would have long-term benefits through the creation of wetlands. The proposed project would not have a noticeable effect on the area's overall long-term productivity.

X. RELATIONSHIP OF THE PROPOSED PROJECT TO LAND-USE PLANS.

The proposed project would be constructed upon Corps fee title land. The affected lands are currently zoned for Recreation Intensive Use and Recreation Low Density, in which bike trails are compatible.

XI. COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES.

A summary of compliance can be found in table EA-3.

A. Endangered Species. Coordination with the U.S. Fish and Wildlife Service (FWS) has indicated that no impacts would occur to the bald eagle as a result of the project.

B. Cultural Resources. The proposed construction may proceed in full compliance with the National Historic Preservation Act and other cultural resources legislation.

C. Federal Water Project Recreation Act. The proposed project provides for recreational construction and is in compliance with this Act.

D. Fish and Wildlife Coordination Act. No significant impacts to fish and wildlife would occur. Coordination has been made with the Iowa Department of Natural Resources (IDNR) and the FWS, and they concur with this finding.

E. Executive Order 11998. Flood Plain Management. Bike trail construction would not encourage development into wetland areas.

F. Wild and Scenic Rivers. No wild or scenic rivers or rivers proposed for study or currently under study for inclusion as a wild or scenic river are within the project area.

TABLE EA-3

Compliance of the Recommended Plan With WRC-Designated Environmental Protection Statutes

Federal Policies	Compliance
Archeological and Historic Preservation Act, 16 U.S.C. 469, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S.C. 1847h-7, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1451, et seq.	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Federal Water Project Recreation Act, 16 U.S.C. 460-1(12), et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 611, et seq.	Full Compliance
Land and Water Conservation Fund Act, 16 U.S.C. 460/-460-11, et seq.	Full Compliance
Marine Protection, Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act, 16 U.S.C. 470a, et seq.	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Not Applicable
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Not Applicable
Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq.	Full Compliance

NOTES

a. Full Compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).

b. Partial Compliance. Not having met some of the requirements that normally are met in the current stage of planning. Partial compliance entries should be explained in appropriate places in the report and referenced in the table.

c. Noncompliance. Violation of a requirement of the statute. Noncompliance entries should be explained in appropriate places in the report and referenced in the table.

d. Not Applicable. No requirements for the statute required compliance for the current stage of planning.

G. Executive Order 1990. Protection of Wetlands. Trail construction will require the placement of fill into the old river channel and abandoned oxbow. Impacts are minimized in the Bob Shetler Trail by taking the shortest, most direct route and avoiding most of the permanent pool of water; and in the Cottonwood Trail by following the existing snowmobile trail. Borrow sites would be used to create or enhance wetlands. This project is in compliance with this Act.

H. Clean Water Act. The proposed project may cause minor, temporary increases in turbidity, although no water quality violations should occur. A Section 404(b)(1) evaluation has been prepared (attached), and Section 401 certification has been received from the State of Iowa. A copy of the certification can be found under Pertinent Correspondence.

I. Clean Air Act. Minor, temporary impacts may occur from increased dust and exhaust during construction. No air quality standards should be violated.

J. Farmland Protection Policy Act. None of the lands affected by the project are part of a farm or are currently used as farmland. They are part of Federal lands acquired for flood control and water storage and are therefore not included as prime farmland.

FINDING OF NO SIGNIFICANT IMPACT

BOB SHETLER AND COTTONWOOD RECREATION AREAS
BIKE TRAIL CONSTRUCTION
SAYLORVILLE RESERVOIR
POLK COUNTY, IOWA

Having reviewed the information provided by this Environmental Assessment, along with data obtained from cooperating Federal, State, and local agencies and from the interested public, I find that the proposed bike trail construction at Saylorville Reservoir will not significantly affect the quality of the environment. Therefore, it is my determination that an Environmental Impact Statement is not required. This determination will be reevaluated if warranted by later developments.

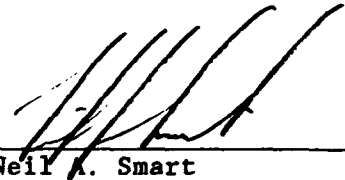
The alternative considered along with the preferred action was:

- No Federal Action.

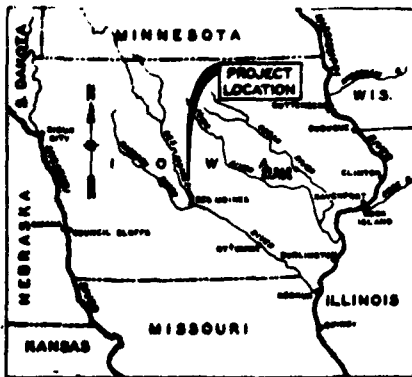
Factors considered in making a determination that an Environmental Impact Statement was not required are as follows:

- a. The actions minimize impacts by taking direct routes or follow the paths of existing trails.
- b. Impacts are offset by the enhancement or creation of wetlands through the use of borrow.
- c. No significant social, economic, environmental, or cultural impacts are anticipated as a result of these actions.

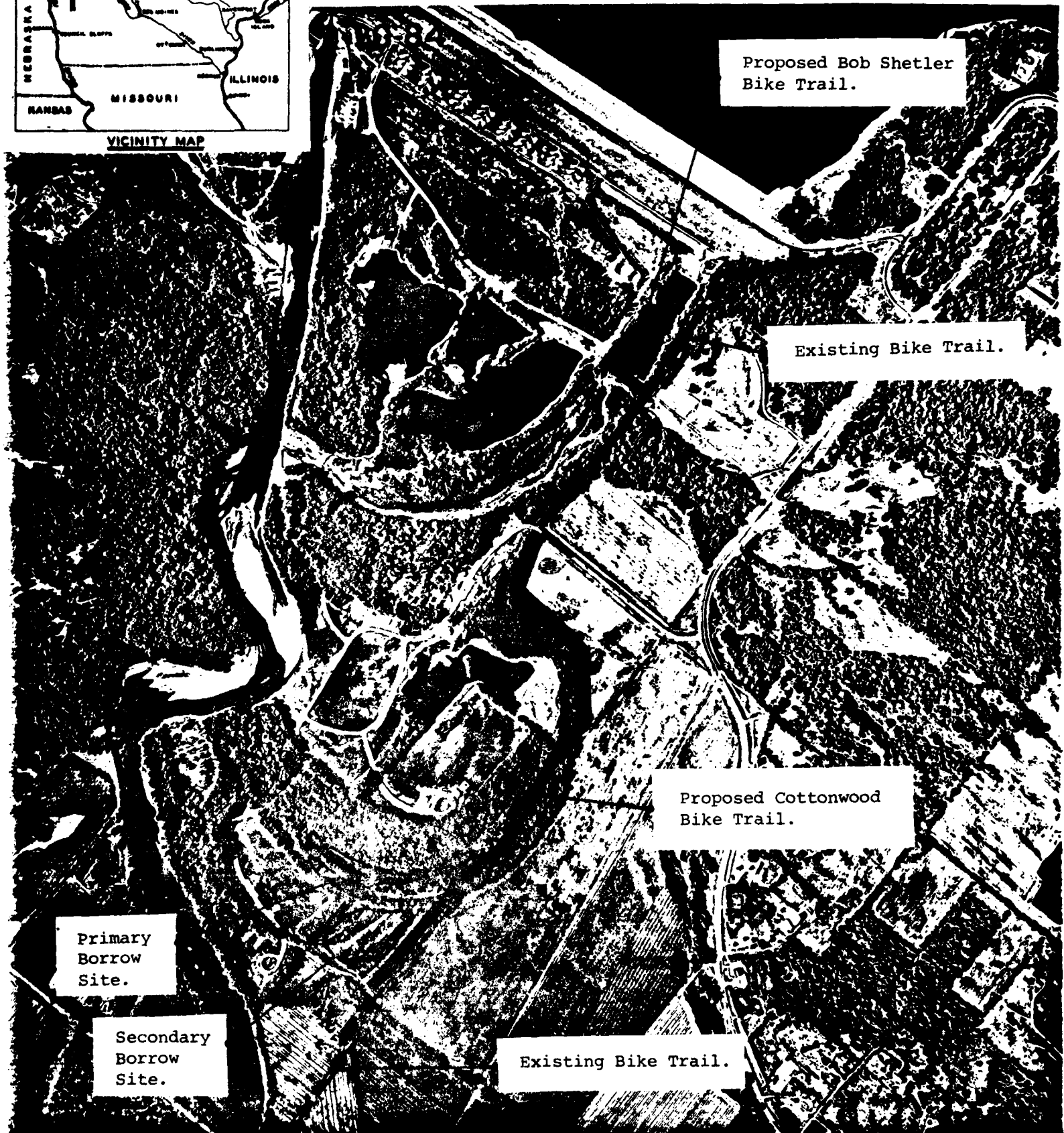
19 April 89
Date



Neil A. Smart
Colonel, U.S. Army
District Engineer



VICINITY MAP



Proposed Bob Shetler
Bike Trail.

Existing Bike Trail.

Proposed Cottonwood
Bike Trail.

Primary
Borrow
Site.

Secondary
Borrow
Site.

Existing Bike Trail.

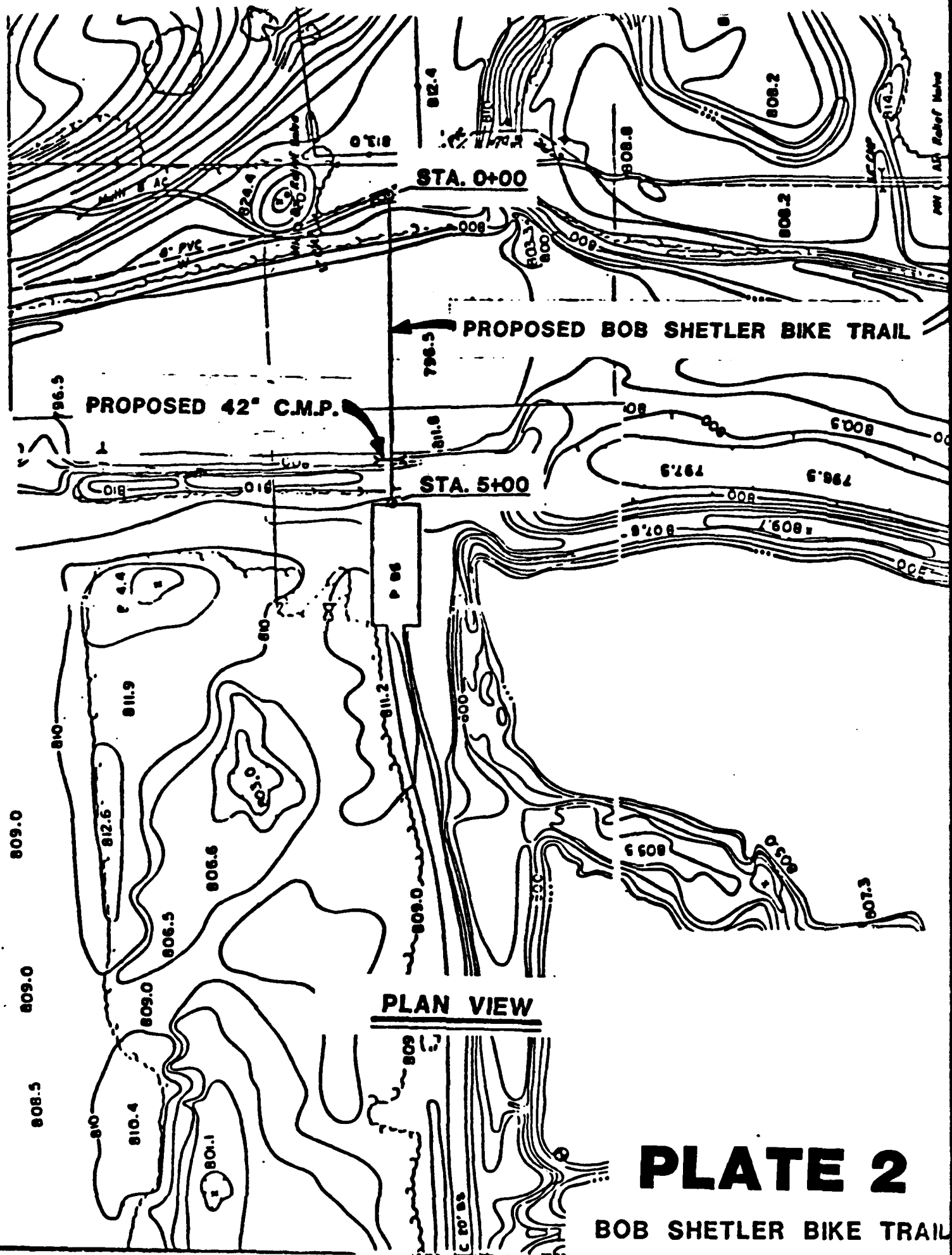
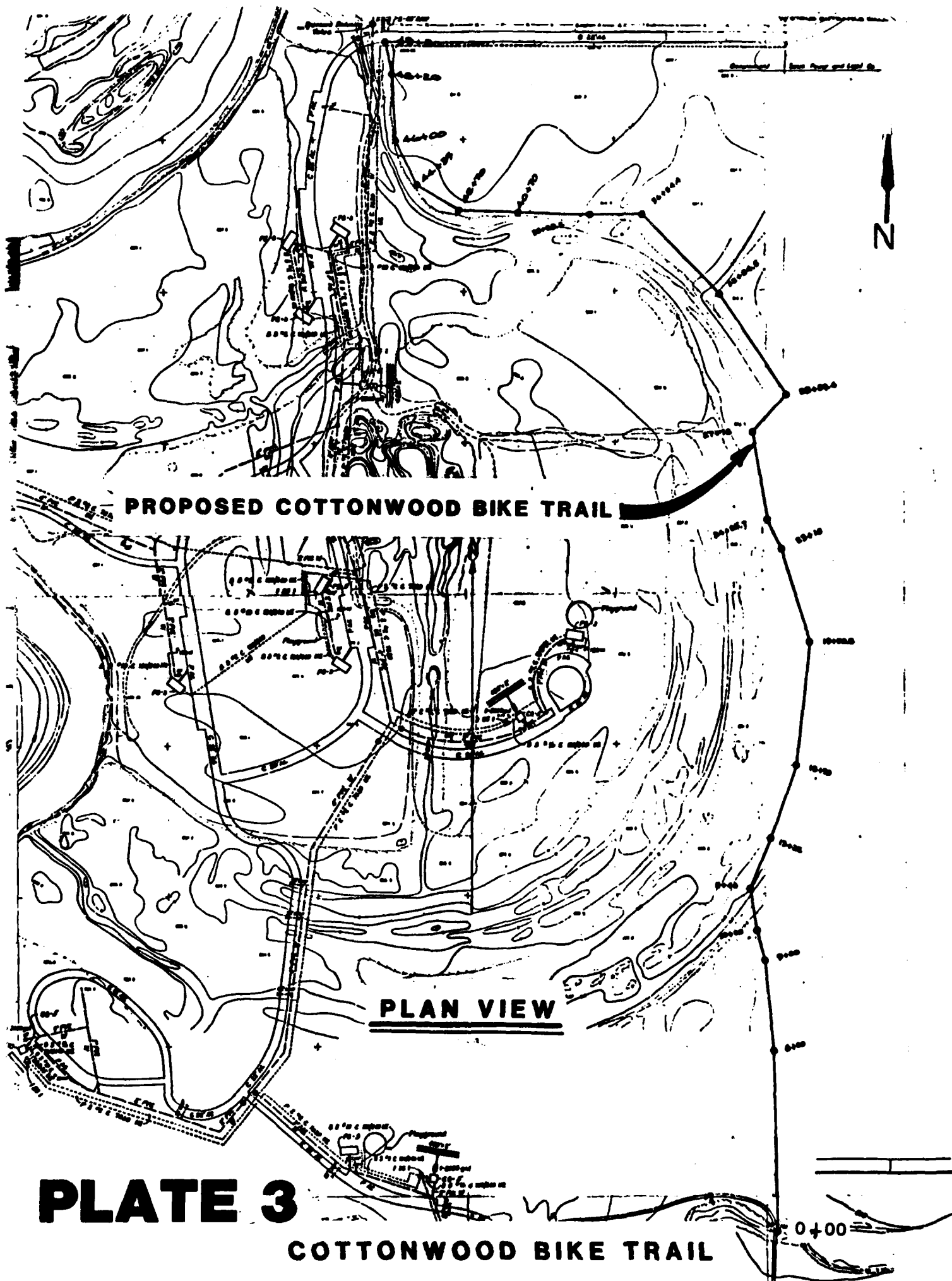
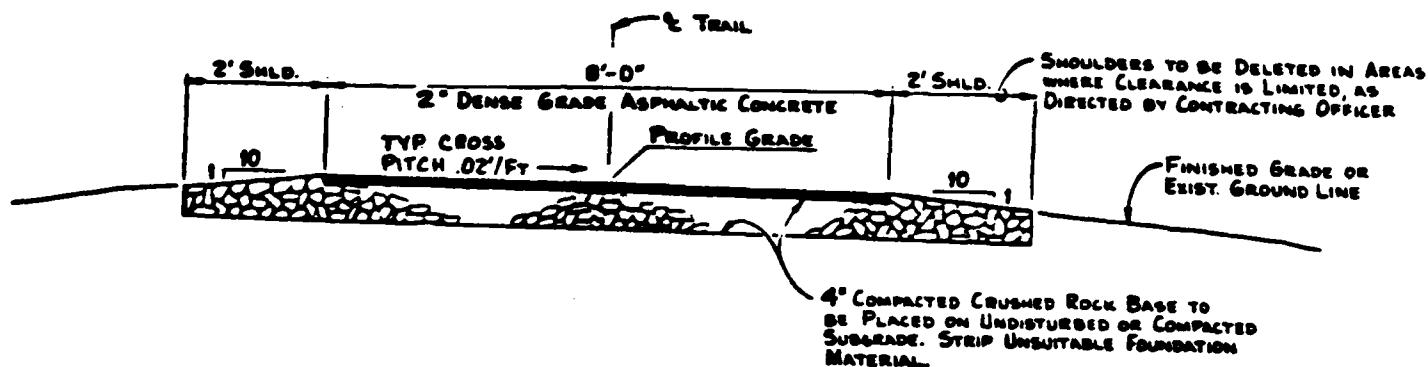


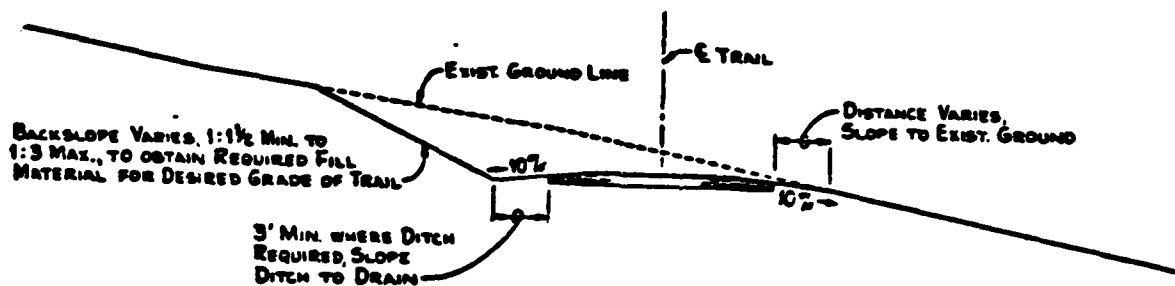
PLATE 2

BOB SHETLER BIKE TRAIL

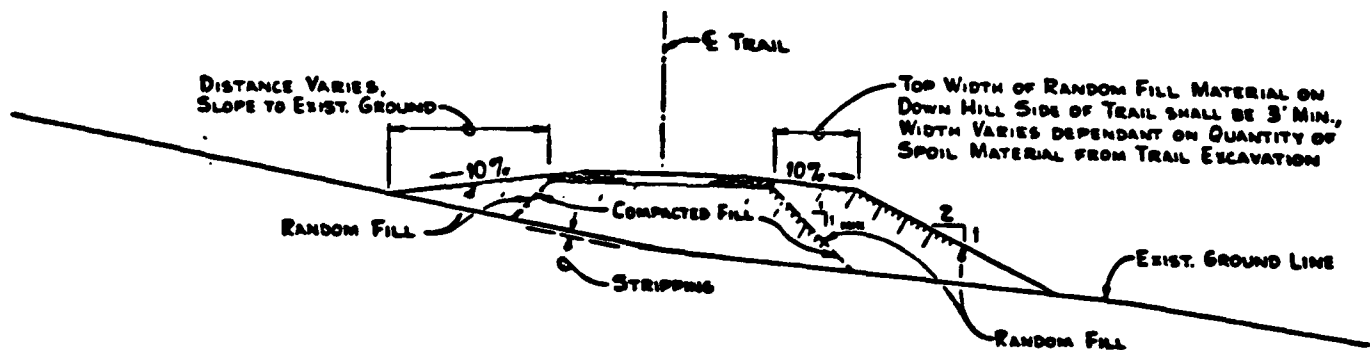




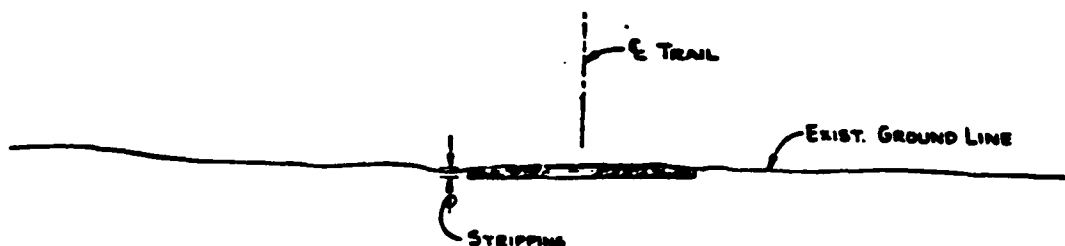
TYPICAL SECTION
TRAIL SURFACING



CUT SECTION

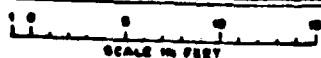


FILL SECTION



SECTION ON EXISTING GROUND

TYPICAL SECTIONS





REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING—P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

CENCR-PD-E

CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION
FOR
BOB SHETLER AND COTTONWOOD RECREATION AREAS
BIKE TRAIL CONSTRUCTION
SAYLORVILLE RESERVOIR
POLK COUNTY, IOWA

FEBRUARY 1989

CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION
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POLK COUNTY, IOWA

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CLEAN WATER ACT
SECTION 404(b)(1) EVALUATION
FOR
BOB SHETLER AND COTTONWOOD RECREATION AREAS
BIKE TRAIL CONSTRUCTION
SAYLORVILLE RESERVOIR
POLK COUNTY, IOWA

SECTION I - PROJECT DESCRIPTION

LOCATION.

The Bob Shetler and Cottonwood Bike Trails are located at Saylorville Reservoir in Polk County, Iowa, about 3 miles north of Des Moines, Iowa. Both are located in the Des Moines NW. Quadrangle, sec. 32, in T. 80 N., R. 24 W., with the Cottonwood Trail also extending into sec. 5, T. 79 N., R. 24 W. Plate 1 of the Environmental Assessment (EA) shows the project locations.

GENERAL DESCRIPTION.

It is proposed to construct two bike trails. The Bob Shetler and Cottonwood Trails would be 500 and 4,930 feet long, respectively. Plates 2 and 3 of the EA show their alignments. Work on both trails would consist of preparing the existing surface, placing borrow material, installing culverts, placing riprap, placing granular base material, and placing asphaltic cement concrete. Plate 4 of the EA shows typical cross sections of the proposed trails. The amounts of the various materials used for construction are shown on table 1 below.

TABLE 1

Construction Materials

<u>Site</u>	<u>Location</u>	<u>Borrow Mat'l (C.Y.)</u>	<u>Culvert (L.F.)</u>	<u>ACC Surfacing (Ton)</u>	<u>Granular Base (Ton)</u>	<u>Riprap (Ton)</u>
Bob Shetler Bike Trail	Sta 0+00-5+00	5,315	70	50	120	100
Cottonwood Bike Trail	Sta 0+00-11+00, Sta 28+00-49+30	0	0	315	750	0
	Sta 11+00-28+00	4,200	50	170	410	50

Nearly all of Bob Shetler Trail alignment would be within the old bed of the Des Moines River, and 1,700 feet (Stations 11+00 to 28+00) of the Cottonwood Bike Trail is within an abandoned oxbow of the river. Both are classified as palustrine wetlands. This Section 404(b)(1) Evaluation addresses the placement of fill into these areas.

PURPOSE AND AUTHORITY.

The purposes of the proposed bike trails are to provide direct access to the Bob Shetler Recreation Area and an alternate traffic-free route through the Cottonwood Recreation Area.

The Saylorville Lake project, located approximately 11 miles northwest of Des Moines, Iowa (see plate 1 of the EA), was authorized for flood control in the Flood Control Act of July 3, 1958. This authorization was based upon recommendations established in Senate Document No. 9, 85th Congress, 1st Session. The development of recreation facilities at Saylorville was initiated at full Federal expense under the direction of Section 4 of the Flood Control Act of December 22, 1944. The development and construction of these facilities is continued at full Federal expense under the authorization of Section 111 of the Water Resources Development Act of 1976.

GENERAL DESCRIPTION OF DREDGED AND FILL MATERIALS.

Borrow (or fill) material would come from two potential sites. The primary site is located adjacent the Cottonwood Bike Trail within the abandoned oxbow of the Des Moines River. Its soils consist of alluvial land (predominantly sand and gravel covered by a varying layer of silt). However, if moisture conditions do not allow access to the preferred site, then a secondary borrow site would be used. It is located south of the preferred site in an area of old field succession, also near the proposed Cottonwood Trail. Soil consists of deep loam over sand and gravel.

After removal of fill, the borrow areas would be shaped and sloped to provide wetland enhancement at the preferred site or creation of additional wetland at the secondary site.

Other materials would include: riprap which would consist of limestone rock at 150 lb. maximum size; the granular base, which is road stone generally of crushed limestone with a 1-inch maximum size; and a trail surface consisting of asphaltic cement concrete. All three materials would be obtained from approved commercial sources.

DESCRIPTION OF PROPOSED DISCHARGE SITES.

The Bob Shetler Bike Trail crosses the old bed of the Des Moines River. The affected area consists of a large, permanent pool of water bordered downstream by a berm of slightly higher ground. Fill would be placed into the edge of the pool and berm at the west end, and on the berm only at the east end. The berm of higher ground is vegetated with a sandbar willow (Salix interior) thicket and a rice cutgrass (Leersia oryzoides) ground cover. A narrow, sandy shoreline exists between the pool and berm that is vegetated with sedge (Carex sp.) and smartweed (Polygonum sp.).

The Cottonwood Bike Trail passes through 1,700 feet of a naturally abandoned meander (oxbow) of the Des Moines River. It lacks permanent water but is seasonally flooded. The area through which the trail passes consists of

middle-aged bottomland forest dominated by silver maple (Acer saccharinum). Other species include cottonwood (Populus deltoides), American elm (Ulmus americana), green ash (Fraxinus pennsylvanica), hackberry (Celtis occidentalis), and box elder (Acer negundo). Ground cover consists mostly of stinging nettle (Urtica dioica). The proposed bike trail will follow an existing snowmobile path, which is devoid of trees within its alignment.

DESCRIPTION OF DISPOSAL METHOD.

Fill materials would be moved by truck and placed on site. A backhoe, bulldozer, surface compactor, or similar equipment would be used to adjust the materials and shape the slopes to correct dimensions. A small amount of fill may be moved directly by bulldozer.

SECTION 2 - FACTUAL DETERMINATIONS

PHYSICAL SUBSTRATE DETERMINATIONS.

Soils within the old riverbed and abandoned oxbow consist of alluvium that is predominantly sand and gravel. The oxbow contains a surface layer of silt.

WATER CIRCULATION, FLUCTUATION, AND SALINITY DETERMINATIONS.

WATER.

The project site, which is part of the Des Moines River floodplain, is a freshwater system. Most of the affected areas do not contain permanent water. The discharge of fill material is basically inert and would not result in an appreciable change to water chemistry. Water clarity, odor, taste, dissolved gas levels, or color would not be significantly affected. The nature of the fill would not cause any changes in nutrient levels. Flowages should remain relatively unimpeded. Eutrophication modifications should be negligible.

CURRENT PATTERNS AND CIRCULATION.

Under flood conditions from the Des Moines River, water may back up into these areas, and some circulation or current patterns may occur. However, during normal water levels, the old riverbed and abandoned oxbow do not contain flowing water. Fill at neither site would have a noticeable effect on current patterns or circulation.

NORMAL WATER LEVEL FLUCTUATIONS.

Culverts would be placed in the old riverbed and abandoned oxbow, where the bike trails would cross the natural drainage points. This will allow flows to pass back and forth during times of flooding. There should be no noticeable effect to normal water level fluctuations.

ACTIONS TAKEN TO MINIMIZE IMPACTS.

Construction would take place at periods of low or no water to avoid excess turbidity. Upon completion of construction, disturbed areas would be reseeded to prevent erosion.

CONTAMINANT DETERMINATIONS.

Earthen borrow would come from rural sites away from concentrated urban or industrial development and is not likely to contain hazardous or toxic substances. Bedding rock, riprap, and asphaltic cement concrete would be chemically stable and obtained from approved commercial sources.

AQUATIC ECOSYSTEM AND ORGANISM DETERMINATIONS.

Bike trail construction would place fill in approximately .7 of an acre of the old riverbed and 1.2 acres of abandoned oxbow. Fill placed into permanent water would be limited to the edge of the pool within the old riverbed, making impacts to benthos, plankton, and nekton negligible.

During spring flooding, fish such as buffalo and carp may use the backwater areas for spawning. Culverts will allow for both water flows and fish to pass through either side of the bike trails within the old riverbed and oxbow.

The proposed project would have no noticeable effect on the aquatic food web. No special aquatic sites, sanctuaries, or refuges would be affected. No mudflats, vegetated shallows, nor riffle and pool complexes would be affected by the proposed action.

Terrestrial wildlife should be marginally affected. Larger mammalian species may use the area as foraging and travel corridors. Many of these are nocturnal and would continue to use the project sites after dark when there is less human use. Construction would result in few, if any, losses to mature trees. Tree and cavity nesters should be affected little, though some may prefer to relocate further from the trail.

The bald eagle (Haliaeetus leucocephalus) is listed as a federally threatened species that winters in Polk County, Iowa. Suitable habitat does not exist in the project area, and no impacts to the bald eagle should occur.

PROPOSED DISPOSAL SITE DETERMINATIONS.

The proposed project would cause minor, temporary increases in turbidity during construction. No violations to water quality standards should occur. State certification under Section 401 of the Clean Water Act has been received from the State of Iowa (see Pertinent Correspondence).

DETERMINATION OF CUMULATIVE EFFECTS ON THE AQUATIC ECOSYSTEM.

The proposed project would result in the placement of fill in approximately 1.9 acres of wetland. However, the use of borrow sites, and their subsequent

shaping, would either enhance existing wetlands or create new wetlands of approximately the same size. There should be no detrimental cumulative impacts.

DETERMINATION OF SECONDARY EFFECTS ON THE AQUATIC ECOSYSTEM.

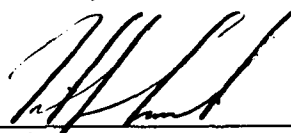
Increased human use resulting from use of the bike trails may result in minor disturbances to wildlife.

Increased turbidity resulting from erosion of disturbed areas before reestablishment of vegetation also may cause minor, temporary impacts to water quality.

SECTION 3 - FINDINGS OF COMPLIANCE OR
NONCOMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE

1. No significant adaptations to the guidelines were made relating to this evaluation.
2. The alternative of no Federal action was not feasible because it did not provide for a traffic-free route through the Cottonwood Recreation Area nor access from the Bob Shetler Recreation Area to the existing bike trail.
3. Certification under Section 401 of the Clean Water Act has been received from the Iowa Department of Natural Resources.
4. The project would not introduce toxic substances into nearby water or result in appreciable increases in existing levels of toxic materials.
5. No significant impacts to Federal or State-listed endangered or threatened species will result from this project.
6. The proposed projects are in inland fresh water systems. No marine sanctuaries are involved.
7. No municipal or private water supplies would be affected. Minor impacts would result from the construction sites; however, no sensitive or critical habitats would be affected, and no long-term impacts would occur.
8. Project construction materials will be physically and chemically stable.
9. The proposed actions will not significantly affect water quality or the aquatic ecosystem and are in compliance with the requirements of guidelines for Section 404(b)(1) of the Clean Water Act, as amended.

19 April 89
Date



Neil A. Smart
Colonel, U.S. Army
District Engineer

STATEMENT OF FINDINGS

I. Project Description.

A. Bike trails would be constructed at the Bob Shetler and Cottonwood Recreation Areas. Trails would be 500 and 4,930 feet respectively for a total of 5,430 feet. Removal of material from the borrow sites would be used to enhance existing or create new wetland sites.

B. The project is covered in an Environmental Assessment (EA) dated February 1989, entitled "Environmental Assessment, Bob Shetler and Cottonwood Recreation Areas, Bike Trail Construction, Saylorville Reservoir, Polk County, Iowa".

II. Statutory Authorities and Administrative Determination.

A. I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning this permit application, as well as the stated views of other interested federal and non-federal agencies and the concerned public.

B. The possible consequences of this proposed work have been studied in accordance with regulations published in 33 CFR Part 230 (Appendix B), 33 CFR Parts 320 to 340, 40 CFR Part 230 (if applicable), and 33 CFR Part 240 (Implementation of Executive Order 11988, Flood Plain Management).

III. Public Interest Review. The public notice issued for the project on 7 March 1989 was sent to the following places: post offices; appropriate city and county officials; adjoining property owners; appropriate State and Federal agencies; local, regional, and national shipping entities; and other interested parties. A mailing list for the public notice is included in the permit application file. The following comments were received:

A. Federal Agencies.

1. Letter from the U.S. Department of Interior, Fish and Wildlife Service, dated 21 March 1989, listing no objection to the issuance of the related permit.

2. Letter from the U.S. Environmental Protection Agency, dated 29 March 1989, concurring with our intent to issue a FONSI, but commenting on a few points. Our reply to the U.S. EPA's comments are attached and can be found under Pertinent Correspondence. No unresolved issues remain.

B. State and Local Agencies.

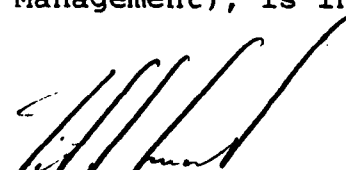
1. Letter from the State Historical Society of Iowa, Bureau of Historic Preservation, dated 13 March 1989, concurring with the comments and recommendations for the project area.

C. Individuals or Organized Groups. No individuals or organized groups commented on the project.

IV. Summary of Environmental Impact Review. The Section 404 (b)(1) evaluation prepared for this project concluded that the proposed activity will comply with the guidelines set forth in 40 CFR Part 230 with appropriate conditions as discussed in the evaluation document.

V. Summary of Findings. I find that performance of the project as prescribed by regulations published in 33 CFR Part 230 (Appendix B), 33 CFR Parts 320 to 340, 40 CFR Part 230 (if applicable), and 33 CFR Part 240 (Implementation of Executive Order 11988, Flood Plain Management), is in the public interest.

19 Apr. 89
date


Neil A. Smart
Colonel, U.S. Army
District Engineer

PERTINENT CORRESPONDENCE

CONVERSATION RECORD		TIME 1000	DATE 3 FEB 1989
TYPE <input checked="" type="checkbox"/> VISIT <input type="checkbox"/> CONFERENCE <input type="checkbox"/> TELEPHONE		<input type="checkbox"/> INCOMING <input type="checkbox"/> OUTGOING	
Location of Visit/Conference: FWS OFFICE, ROCK ISLAND, ILLINOIS			
NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU CHUCK DAVIS WAYNE FISHER		ORGANIZATION (Office, dept., bureau, etc.) FISH AND WILDLIFE SERVICE ROCK ISLAND, ILLINOIS	
SUBJECT Saylorville Reservoir Bike Trail Construction At Bob Shiller and Cottonwood Recreation Areas.		TELEPHONE NO.	
SUMMARY			

I talked to Chuck Davis and Wayne Fisher concerning the above project. It was indicated that there would be no impacts to endangered species (bald eagle) as a result of bike trail construction, and that there should be no overall significant impacts to fish and wildlife resources. Wayne Fisher stated that there was no objections to the project.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION RON KLUMPF	SIGNATURE Ronald F. Klumpf	DATE 3 FEB 1989
ACTION TAKEN		

SIGNATURE	TITLE	DATE
-----------	-------	------

CONVERSATION RECORD

TIME

1060

DATE

3 FEB 1989

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Darryl Hayes

ORGANIZATION (Office, dept., bureau, etc.)

Iowa DNR

TELEPHONE NO.

515
281-8675

SUBJECT

Saylorville Reservoir Bike Trails at Bob
Skinner and Cottonwood Recreation Areas.

SUMMARY

Darryl Hayes called to say his agency had reviewed the above project and that they had no problems or comments at this time.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

Ron Klump

SIGNATURE

Ron Klump

DATE

3 FEB 1989

ACTION TAKEN

SIGNATURE

TITLE

DATE

CONVERSATION RECORD

TIME

0800

DATE

6 FEB 1989

TYPE

☐ VISIT

☐ CONFERENCE

☒ TELEPHONE

☒ INCOMING

☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

MIKE BRONOSKI

ORGANIZATION (Office, dept., bureau, etc.)

U.S. EPA.
KANSAS CITY, KANSAS

TELEPHONE NO.

SUBJECT

Bike trail construction at Bob Sholes and Cottonwood
Recreation Areas, Saylorsville Reservoir

SUMMARY

Mike Bronoski called and said that his agency had reviewed the Corps letter concerning the above bike trails. He also stated that he had no problems or concerns with the project.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

RON KLUMP

SIGNATURE

Ron Klump

DATE

6 FEB 1989

ACTION TAKEN

SIGNATURE

TITLE

DATE



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

February 23, 1989

Rick Stebens
Design Branch
U.S. Army COE
Clock Tower Building
P. O. Box 2004
Rock Island, IL 61204-2004

SUBJECT: Request for state Section 401 certification

Construction of bike trails at Saylorville Lake;
Section 32, T80N, R24W;
Section 5, T79N, R24W;
Polk County, Iowa

Water Quality Designation: The Saylorville Reservoir is classified as a B(w) waterbody. This waterbody is protected for fish, wildlife, aquatic, and semiaquatic uses, and for secondary recreational contact uses.

Dear Mr. Stebens:

This department has received and reviewed the request for state certification pursuant to Section 401 of the Clean Water Act. This letter certifies that the department has determined there is reasonable assurance the proposed activity will be conducted in a manner which will not violate the water quality standards of the state of Iowa.

Sincerely,

KATHLEEN A. LEE
ENVIRONMENTAL SPECIALIST
WATER QUALITY PLANNING SECTION

KAL:lb/E:KL-4

cc: Darrell Hayes, IDNR Coordination & Information, LOCAL

DISTRIBUTION LIST

DISTRIBUTION LIST FOR
ENVIRONMENTAL ASSESSMENT
BOB SHETLER AND COTTONWOOD RECREATION AREAS
BIKE TRAIL CONSTRUCTION
SAYLORVILLE RESERVOIR
POLK COUNTY, IOWA

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DIRECTOR-DEPT OF ECOLOGY & COMM, DEPARTMENT OF COMMERCE
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WASHINGTON DC 20230

DR ALLAN HIRSCH - DIRECTOR, OFFICE OF FEDERAL ACTIVITIES (A-104)
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WASHINGTON DC 20460

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STATE CONSERVATIONIST, SOIL CONSERVATION SERVICE USDA
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IOWA DEPT OF NATURAL RESOURCES, 123 NORTH CAPITOL STREET
IOWA CITY IA 52242

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AMES IA 50010

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KANSAS CITY KS 66101

MR MORRIS KAY - ADMINISTRATOR,
US ENVIRONMENTAL PROTECTION AGENCY, 726 MINNESOTA AVE
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STATE HISTORICAL SOCIETY OF IOWA, CAPITOL COMPLEX
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DEAN ROOSA, STATE ECOLOGIST
WALLACE STATE OFFICE BLDG, EAST NINTH ST AND GRAND AVE
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RICHARD BRAUN, POLK CO BO OF SUPVRS
POLK CO OFFICE BLDG, 2ND & COURT AVENUES
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MR R E VAN GURDY PE, POLK COUNTY ENGINEER
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CENCR-ED-D	CENCR-OD
CENCR-ED-H	CENCR-OD-S
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